



## Center for Health Statistics



September  
2002

DATA  
SUMMARY  
No.  
DS02-09000

This Data  
Summary is  
one of a  
series of  
leading  
cause of  
death reports.

### Highlights

- Cancer continues to rank 2<sup>nd</sup> among the leading causes of death in California and in the U.S.
- Of all cancer deaths in California, 70 percent were among people age 65 and older.
- Among California residents, Whites had 73.9 percent of all cancer deaths in 2000.
- Among the major race/ethnic groups, Blacks had the highest age-adjusted cancer death rate (239.5 deaths per 100,000 population).

## Cancer Deaths, California 2000

By Cheryl Wilson

### Introduction

Cancer continues to be the second leading cause of death in California and in the United States (U.S.), following heart disease.<sup>1,2</sup> In 2000, cancer deaths increased 0.2 percent among California residents from 52,880 deaths reported for 1999 to 53,005 in 2000.<sup>3,4</sup> U.S. residents also experienced an increase (0.4 percent) in cancer from 549,838 deaths in 1999 to 551,833 in 2000. Similar to 1999 cancer data, 23 percent of all deaths in California and in the U.S. were from cancer.<sup>1,2,5</sup>

Due to the prevalence of cancer deaths in this country, the U.S. Public Health Service established a health objective for *Healthy People 2010*, seeking to reduce the number of cancer deaths to an age-adjusted rate of no more than 159.9 per 100,000 population.<sup>6</sup>

This report presents data on California's cancer deaths for 2000, and provides analysis of crude and age-adjusted death rates for California residents by sex, age, and race/ethnicity. The cancer data included in this report are extracted from vital statistics records with death attributed to all cancers as defined by ICD-10 codes C00-C97 in accordance with the National Center for Health Statistics Reports.<sup>7</sup>

<sup>1</sup>Ficenec S. *Advance Report: California Vital Statistics*, Preliminary Data for 2000. Center for Health Statistics, California Department of Health Services. May 2002.

<sup>2</sup>National Center for Health Statistics, Deaths: Preliminary Data for 2000, *National Vital Statistics Reports*, DHHS Pub. No. (PHS) 2001-1120, PRS 01-0599 (10/2001).

<sup>3</sup>State of California, Department of Health Services, Death Records. 1999.

<sup>4</sup>State of California, Department of Health Services, Death Records. 2000.

<sup>5</sup>National Center for Health Statistics, Deaths: Final Data for 1999, *National Vital Statistics Reports*, DHHS Pub. No. (PHS) 2001-1120, PRS 01-0573 (9/2001).

<sup>6</sup>U.S. Department of Health and Human Services. *Healthy People 2010 Objectives* (Second Edition, in Two Volumes). Washington, D.C., January 2001.

<sup>7</sup>National Center for Health Statistics. *Vital Statistics, Instructions for Classifying the Underlying Cause of Death*. NCHS Instruction Manual, Part 9. Hyattsville, Maryland: Public Health Service, 1999.

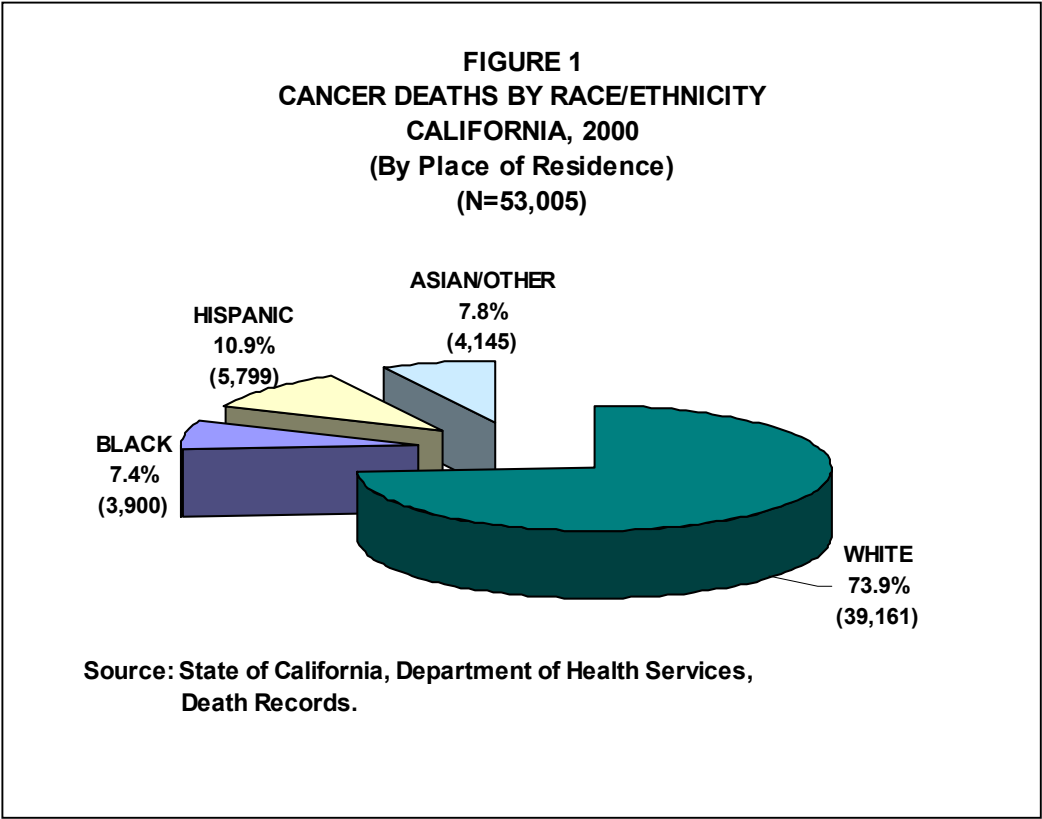
A description of [methods](#) and a brief overview of [data limitations](#) and [qualifications](#) are provided at the end of this report.

## Cancer Deaths

**Table 1** (page 9) displays California's cancer death data by race/ethnicity, age group, and sex. In 2000, males and females had almost equal proportions of the total cancer deaths in California. For the second consecutive year, California residents age 65 and older had approximately 70 percent of all cancer deaths.<sup>8</sup>

**Figure 1** shows Whites had the highest percentage of cancer deaths with 73.9 percent, followed by Hispanics with 10.9 percent, Asian/Other with 7.8 percent, and Blacks with 7.4 percent.

**Table 1** (page 9) shows that among the race/ethnic groups listed, cancer deaths were higher for males than for females among Asian/Other, Blacks, and Hispanics. White females, however, had a slightly higher number of cancer deaths than White males (19,583 compared to 19,578).



## Cancer Crude Death Rates

As shown in **Table 1** (page 9), California's 2000 cancer crude death rate was 153.0 per 100,000 population, a decrease of 1.4 percent from the 1999 rate of 155.2. Between 1999 and 2000, the difference in crude death rates was statistically significant.

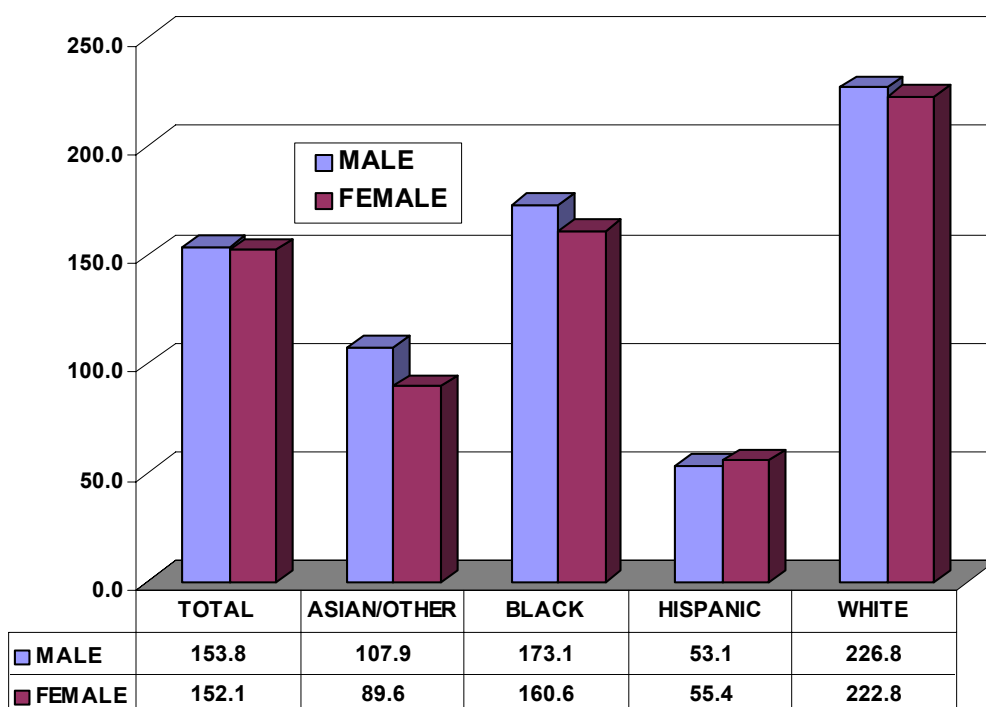
In 2000, Whites had the highest crude death rate (224.8), followed by Blacks (166.8), Asian/Other (98.6), and Hispanics (54.3). The crude rate for Whites was 4.1 times higher than the rate for Hispanics, 1.3 times higher than Blacks, and 2.3 times higher than Asian/Other.

**Figure 2** (page 3) shows California's male residents had a crude death rate of 153.8 per 100,000 population and female residents had a rate of 152.1. Among males, Whites had the highest crude death rate (226.8), followed by Blacks (173.1), Asian/Other (107.9), and Hispanics (53.1). For females, similar patterns occurred among the race/ethnic

<sup>8</sup>Wilson C. Data Summary, *Cancer Deaths, California 1999*. Center for Health Statistics, California Department of Health Services, March 2002.

See the [Methodological Approach](#) Section later in this report for an explanation of crude, age-specific, and age-adjusted death rates.

**FIGURE 2**  
**CANCER CRUDE DEATH RATES BY**  
**SEX AND RACE/ETHNICITY**  
**CALIFORNIA, 2000**  
**(By Place of Residence)**



Source: State of California, Department of Health Services, Death Records.

groups in that Whites had the highest crude death rate (222.8), followed by Blacks (160.6), Asian/Other (89.6), and Hispanics (55.4). With the exception of Hispanics, males had higher crude death rates than females within each specific race/ethnic group. The rate differences between males and females were statistically significant for Asian/Other and Blacks, but not for Hispanics or Whites.

## Cancer Age-Specific Death Rates

**Table 1** (page 9) shows that among California residents, age-specific death rates increased with the age of the decedent beginning with the age group 5 to 14. The lowest reliable rates occurring in the 5 to 14 age group (2.5) and the highest rates in the 85 and older age group with 1,619.3 deaths per 100,000 population.

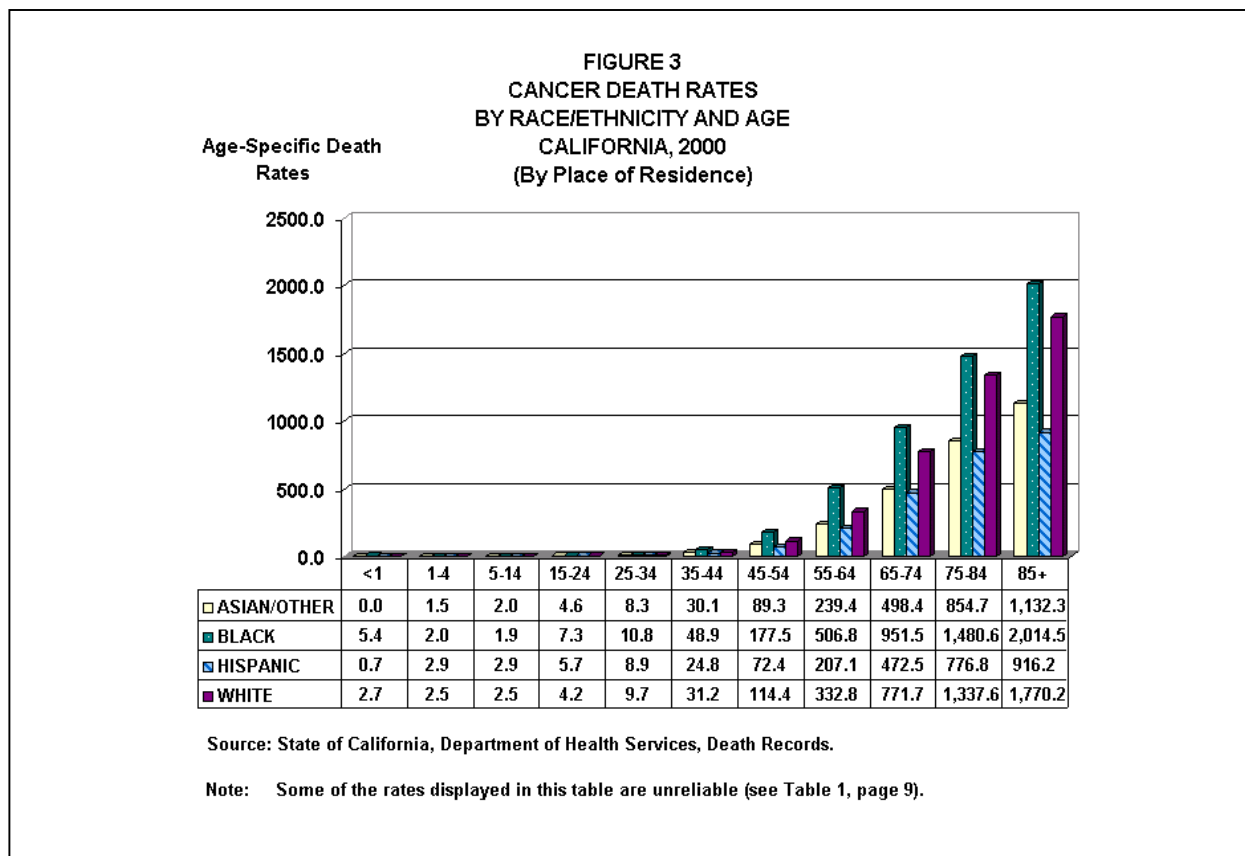
Among males and females in California, males had higher age-specific death rates in the under 24 and the 55 and older age groups, whereas females had higher rates in the 25 to 54 age groups.

As shown in **Figure 3** (page 4), age-specific death rates increased dramatically after age 34 for all race/ethnic groups. Among the reliable age-specific death rates, Blacks had the

See the Vital Statistics Query System (VSQ) at our Web site [www.dhs.ca.gov/hisp/Applications/vsq/vsq.cfm](http://www.dhs.ca.gov/hisp/Applications/vsq/vsq.cfm) to create your own vital statistics tables.

highest rates for all age groups 15 and older. Whites had the lowest rates in the 15 to 24 age group, Asian/Other in the 25 to 34 age groups, and Hispanics in the 35 and older age groups.

For all the major race/ethnic groups, the highest reliable age-specific death rates occurred among decedents in the age group 85 and older. The lowest reliable rates varied with Hispanics and Whites having the lowest rates in the 1 to 14 age groups and Asian/Other and Blacks in the 15 to 24 age group.



## Cancer Age-Adjusted Death Rate

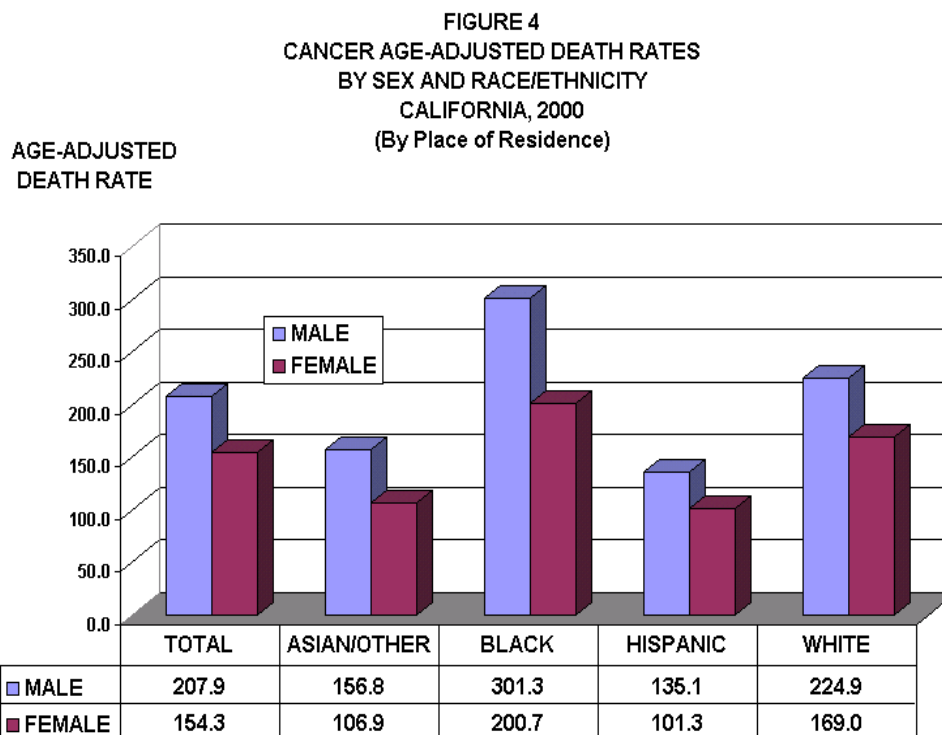
As shown in **Table 1** (page 9), California's age-adjusted death rate was 175.3 per 100,000 population, which was lower than the U.S. age-adjusted death rate of 200.5. California has not yet met the *Healthy People 2010* National Health Objective of reducing the number of cancer deaths to an age-adjusted rate of no more than 159.9 per 100,000 population.<sup>2,6,9</sup>

**Figure 4** (page 5) shows age-adjusted cancer death rates among California residents by race/ethnicity and sex. In 2000, the age-adjusted death rate among males in California was significantly greater than the rate for females. The male age-adjusted death rate of 207.9 was 1.3 times greater than the female rate of 154.3.

Among the major race/ethnic groups, Blacks had the highest age-adjusted death rate (239.5 deaths per 100,000 population), followed by Whites (190.4), Asian/Other (128.8),

<sup>9</sup> Klein RJ, Schoenborn, CA. *Healthy People 2010 Statistical Notes: Age Adjustment using the 2000 Projected U.S. Population*. National Center for Health Statistics, DHHS Publication, No 20, January 2001.

and Hispanics (114.7). Similar patterns also occurred among males and females. Black males had the highest age-adjusted death rate (301.3), followed by White males (224.9), Asian/Other males (156.8), and Hispanic males (135.1). Among females, Blacks had the highest rate (200.7), followed by Whites (169.0), Asian/Other (106.9), and Hispanics (101.3). The differences among males and females within the major race/ethnic groups were statistically significant.



Source: State of California, Department of Health Services, Death Records.

## Cancer Death Rates for California Counties

**Table 2** (page 10) shows the number of cancer deaths averaged over a two-year period from 1999 to 2000 with crude and age-adjusted death rates for California's 58 counties.

Among the 54 counties with reliable crude death rates, Mariposa County had the highest rate, 312.1 deaths per 100,000 population, a rate 2.8 times higher than the lowest rate of 109.6 in Kings County. Yuba County had the highest reliable age-adjusted death rate (241.0), and Lassen County had the lowest rate (145.3).

The 2010 National Health Objective to reduce cancer deaths to an age-adjusted rate of no more than 159.9 deaths per 100,000 population was met by six counties (four with reliable age-adjusted death rates), but not California as a whole.

## Cancer Deaths among the Three Local City Health Jurisdictions

**Table 3** (page 6) shows the two-year average (1999 to 2000) number of cancer deaths and crude death rates among city health jurisdictions.

For more data, see DHS Center for Health Statistics, Home Page at [www.dhs.ca.gov/org/hisp/chs/chsindex.htm](http://www.dhs.ca.gov/org/hisp/chs/chsindex.htm)

Age-adjusted death rates were not calculated for city health jurisdictions because city population data by age are not available.

Long Beach had the highest average number of deaths, (656.5), followed by Pasadena (261.5), and Berkeley (150.5). The crude death rates were 197.8 per 100,000 population for Pasadena, 147.3 for Berkeley, and 145.4 for Long Beach.

## Methodological Approach

The methods used to analyze vital statistics data are important. Analyzing only the number of deaths has

its disadvantages and can be misleading because the population at risk is not taken into consideration. Crude death rates show the actual rate of dying in a given population, but because of the differing age compositions of various populations, they do not provide a statistically valid method for comparing geographic areas and/or multiple reporting periods. Age-specific death rates are the number of deaths per 100,000 population in a specific age group and are used along with standard population proportions to develop a weighted average rate. This rate is referred to as an age-adjusted death rate and removes the effect of different age structures of the populations whose rates are being compared. Age-adjusted death rates therefore provide the preferred method for comparisons of different race/ethnic groups, sexes, and geographic areas and for measuring death rates over time. The year 2000 United States population standard is used as the basis for age-adjustments in this report.

## Data Limitations and Qualifications

The cancer death data presented in this report are based on the vital statistics records with ICD-10 codes C00-C97 as defined by the National Center for Health Statistics.<sup>10</sup>

The term “significant” within the text indicates statistically significant based on the difference between two independent rates ( $p < .05$ ).

As with any vital statistics data, caution needs to be exercised when analyzing small numbers, including the rates derived from them. Death rates calculated from a small number of deaths and/or population tend to be unreliable and subject to significant variation from one year to the next. To assist the reader, 95 percent confidence

**TABLE 3  
CANCER DEATHS  
AMONG THE CITY HEALTH JURISDICTIONS  
CALIFORNIA, 1999-2000  
(By Place of Residence)**

CITY HEALTH JURISDICTION	AVERAGE NUMBER OF DEATHS	1999 POPULATION	CRUDE DEATH RATE
BERKELEY	150.5	102,200	147.3
LONG BEACH	656.5	451,500	145.4
PASADENA	261.5	132,200	197.8

Note: Rates are per 100,000 population; ICD-10 codes C00-C97.

Source: State of California, Department of Finance, E-4 Historical City/County Population Estimates 1991-2000, with 1990 and 2000 Census Counts, March 2002.

State of California, Department of Health Services, Death Records.

<sup>10</sup>Kochanek KD, Smith BL, Anderson RN. *Deaths: Preliminary Data for 1999*. National Vital Statistics Reports; Vol. 49, No 3. Hyattsville, Maryland: National Center for Health Statistics. 2001.

intervals are provided in the data tables as a tool for measuring the reliability of death rates. Rates with a relative standard error (coefficient of variation) greater than or equal to 23 percent are indicated with an asterisk (\*).

Beginning in 1999, cause of death is reported using the 10<sup>th</sup> Revision of the *International Classification of Diseases* (ICD-10).<sup>11</sup> Cause of death for 1979 through 1998 was coded using the 9<sup>th</sup> Revision of the *International Classification of Diseases* (ICD-9). Depending on the specific cause of death, the number of deaths and death rate are not comparable between ICD-9 and ICD-10. Therefore, our analyses involve only ICD-9 data (1979-1998) on prior reports and only ICD-10 data for this report (1999-2000), and do not combine both ICD-9 and ICD-10 data.

The variability of the rates has increased in Tables 2 and 3 because of the unavailability of earlier years of data. Three-year average numbers using ICD-10 coding for cause of death will reduce this problem when the data are available in 2002.

The four race/ethnic groups presented in the table are mutually exclusive. White, Black, and Asian/Other exclude Hispanic ethnicity, while Hispanic includes any race/ethnic group. In order to remain consistent with the population data obtained from the Department of Finance, the "White race/ethnic group" includes: White, Other (specified), Not Stated, and Unknown, and "Asian/Other race/ethnic group" includes: Aleut, American Indian, Asian Indian, Asian (specified/unspecified), Cambodian, Chinese, Eskimo, Filipino, Guamanian, Hawaiian, Japanese, Korean, Laotian, Other Pacific Islander, Samoan, Thai, and Vietnamese. In addition, caution should be exercised in the interpretation of mortality data by race/ethnicity. Misclassification of race/ethnicity on the death certificate may contribute to death rates that may be underestimated among Hispanics and Asian/Other death rates.<sup>12</sup>

Beginning in 2000, federal race/ethnicity reporting guidelines changed to allow the reporting of up to three races on death certificates. The race/ethnic groups in this report were tabulated based on the first listed race on those certificates where more than one race was listed. Race groups for 2000 are therefore not strictly compatible with prior years and trends should be viewed with caution.

Effective with 1999 mortality data, the standard population for calculating age-adjustments was changed from the 1940 population standard to the year 2000 population standard in accordance with new statistical policy implemented by the National Center for Health Statistics. The new population standard affects measurement of mortality trends and group comparisons. Of particular note are the effects on race comparison of mortality.<sup>13</sup> Age-adjusted rates presented in this report are not comparable to rates calculated with different population standards.

In addition, the population data used to calculate the crude rates in Table 3 (page 6) differ from the population data used to calculate the crude rates in Table 2 (page 10). Consequently, caution should be exercised when comparing the crude rates among the

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<sup>11</sup>World Health Organization. *International Statistical Classification of Diseases and Related Health Problems. Tenth Revision*. Geneva: World Health Organization, 1992.

<sup>12</sup>Rosenberg HM, et al. Quality of Death Rates by Race and Hispanic Origin: A Summary of Current Research, 1999. *Vital and Health Statistics*, Series 2, No. 128, National Center for Health Statistics, DHHS Pub. No. (PHS) 99-1328, September 1999.

<sup>13</sup>Anderson RN, Rosenberg HM. Age Standardization of Death Rates: Implementation of the Year 2000 Standard. *National vital statistics reports*; vol 47, no. 3. Hyattsville, Maryland: National Center for Health Statistics, 1998.

three city health jurisdictions with the rates among the 58 California counties. Age-adjusted rates for city health jurisdictions were not calculated due to the unavailability of city population data by age.

For a more complete explanation of the age-adjustment methodology used in this report, see the *Healthy People 2010 Statistical Notes* publication.<sup>9</sup> Detailed information on data quality and limitations is presented in the appendix of the annual report, *Vital Statistics of California*.<sup>14</sup> Formulas used to calculate death rates are included in the technical notes of the *County Health Status Profiles* report.<sup>15</sup>

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<sup>14</sup>Riedmiller K, Bindra K. *Vital Statistics of California, 1999*. Center for Health Statistics, California Department of Health Services, April 2002.

<sup>15</sup>Schmidt, C. *County Health Status Profiles 2002*. Center for Health Statistics, California Department of Health Services, April 2002.

TABLE 1  
DEATHS DUE TO CANCER BY RACE/ETHNICITY, AGE, AND SEX  
CALIFORNIA, 2000  
(By Place of Residence)

AGE GROUPS	DEATHS			POPULATION			RATES			95% CONFIDENCE LIMITS					
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	LOWER	UPPER	LOWER	UPPER	LOWER	UPPER
<b>TOTAL</b>															
UNDER 1	9	5	4	556,635	284,653	271,982	1.6 *	1.8 *	1.5 *	0.6	2.7	0.2	3.3	0.0	2.9
1 - 4	57	40	17	2,225,385	1,138,537	1,086,848	2.6	3.5	1.6 *	1.9	3.2	2.4	4.6	0.8	2.3
5 - 14	141	83	58	5,567,090	2,851,540	2,715,550	2.5	2.9	2.1	2.1	3.0	2.3	3.5	1.6	2.7
15 - 24	232	143	89	4,615,641	2,395,832	2,219,809	5.0	6.0	4.0	4.4	5.7	5.0	6.9	3.2	4.8
25 - 34	465	232	233	4,998,216	2,643,192	2,355,024	9.3	8.8	9.9	8.5	10.1	7.6	9.9	8.6	11.2
35 - 44	1,750	726	1,024	5,751,694	2,942,371	2,809,323	30.4	24.7	36.5	29.0	31.9	22.9	26.5	34.2	38.7
45 - 54	4,742	2,251	2,491	4,469,059	2,221,466	2,247,593	106.1	101.3	110.8	103.1	109.1	97.1	105.5	106.5	115.2
55 - 64	8,535	4,443	4,092	2,756,954	1,343,573	1,413,381	309.6	330.7	289.5	303.0	316.1	321.0	340.4	280.6	298.4
65 - 74	13,744	7,320	6,424	1,957,505	901,472	1,056,033	702.1	812.0	608.3	690.4	713.9	793.4	830.6	593.4	623.2
75 - 84	16,043	8,140	7,903	1,305,454	533,995	771,459	1,228.9	1,524.4	1,024.4	1,209.9	1,247.9	1,491.2	1,557.5	1,001.8	1,047.0
85 & OLDER	7,283	3,372	3,911	449,762	142,364	307,398	1,619.3	2,368.6	1,272.3	1,582.1	1,656.5	2,288.6	2,448.5	1,232.4	1,312.2
UNKNOWN	4	4	0												
TOTAL	53,005	26,759	26,246	34,653,395	17,398,995	17,254,400	153.0	153.8	152.1	151.7	154.3	152.0	155.6	150.3	154.0
AGE-ADJUSTED							175.3	207.9	154.3	173.8	176.8	205.4	210.4	152.4	156.2
<b>ASIAN/OTHER</b>															
UNDER 1	0	0	0	67,434	34,501	32,933	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 - 4	4	3	1	266,651	136,640	130,011	1.5 *	2.2 *	0.8 *	0.0	3.0	0.0	4.7	0.0	2.3
5 - 14	13	8	5	660,070	339,469	320,601	2.0 *	2.4 *	1.6 *	0.9	3.0	0.7	4.0	0.2	2.9
15 - 24	28	15	13	604,654	309,566	295,088	4.6	4.8 *	4.4 *	2.9	6.3	2.4	7.3	2.0	6.8
25 - 34	54	26	28	649,462	328,916	320,546	8.3	7.9	8.7	6.1	10.5	4.9	10.9	5.5	12.0
35 - 44	210	105	105	698,724	339,557	359,167	30.1	31.0	29.2	26.0	34.1	25.0	36.9	23.6	34.8
45 - 54	501	235	266	561,189	265,710	295,479	89.3	88.4	90.0	81.5	97.1	77.1	99.8	79.2	100.8
55 - 64	761	406	355	317,872	151,006	166,866	239.4	268.9	212.7	222.4	256.4	242.7	295.0	190.6	234.9
65 - 74	1,082	606	476	217,081	95,695	121,386	498.4	633.3	392.1	468.7	528.1	582.8	683.7	356.9	427.4
75 - 84	1,059	588	471	123,907	53,227	70,680	854.7	1,104.7	666.4	803.2	906.1	1,015.4	1,194.0	606.2	726.6
85 & OLDER	432	240	192	38,153	16,296	21,857	1,132.3	1,472.8	878.4	1,025.5	1,239.1	1,286.4	1,659.1	754.2	1,002.7
UNKNOWN	1	1	0												
TOTAL	4,145	2,233	1,912	4,205,197	2,070,183	2,135,014	98.6	107.9	89.6	95.6	101.6	103.4	112.3	85.5	93.6
AGE-ADJUSTED							128.8	156.8	106.9	124.8	132.7	150.2	163.5	102.1	111.8
<b>BLACK</b>															
UNDER 1	2	1	1	37,159	19,020	18,139	5.4 *	5.3 *	5.5 *	0.0	12.8	0.0	15.6	0.0	16.3
1 - 4	3	2	1	147,839	75,557	72,282	2.0 *	2.6 *	1.4 *	0.0	4.3	0.0	6.3	0.0	4.1
5 - 14	8	5	3	414,580	210,046	204,534	1.9 *	2.4 *	1.5 *	0.6	3.3	0.3	4.5	0.0	3.1
15 - 24	26	14	12	356,933	188,930	168,003	7.3	7.4 *	7.1 *	4.5	10.1	3.5	11.3	3.1	11.2
25 - 34	38	19	19	352,200	185,909	166,291	10.8	10.2	11.4	7.4	14.2	5.6	14.8	6.3	16.6
35 - 44	190	81	109	388,391	189,999	198,992	48.9	42.8	54.8	42.0	55.9	33.5	52.1	44.5	65.1
45 - 54	511	252	259	287,837	135,895	151,942	177.5	185.4	170.5	162.1	192.9	162.5	208.3	149.7	191.2
55 - 64	855	434	421	168,721	78,536	90,185	506.8	552.6	466.8	472.8	540.7	500.6	604.6	422.2	511.4
65 - 74	1,005	569	436	105,627	46,350	59,277	951.5	1,227.6	735.5	892.6	1,010.3	1,126.7	1,328.5	666.5	804.6
75 - 84	894	453	441	60,380	23,176	37,204	1,480.6	1,954.6	1,185.4	1,383.6	1,577.7	1,774.6	2,134.6	1,074.7	1,296.0
85 & OLDER	368	175	193	18,268	5,491	12,777	2,014.5	3,187.0	1,510.5	1,808.6	2,220.3	2,714.8	3,659.2	1,297.4	1,723.6
UNKNOWN	0	0	0												
TOTAL	3,900	2,005	1,895	2,337,935	1,158,309	1,179,626	166.8	173.1	160.6	161.6	172.0	165.5	180.7	153.4	167.9
AGE-ADJUSTED							239.5	301.3	200.7	231.8	247.2	287.3	315.3	191.6	209.8
<b>HISPANIC</b>															
UNDER 1	2	1	1	267,741	136,840	130,901	0.7 *	0.7 *	0.8 *	0.0	1.8	0.0	2.2	0.0	2.3
1 - 4	31	23	8	1,055,221	539,226	515,995	2.9	4.3	1.6 *	1.9	4.0	2.5	6.0	0.5	2.6
5 - 14	66	42	24	2,296,937	1,173,481	1,123,456	2.9	3.6	2.1	2.2	3.6	2.5	4.7	1.3	3.0
15 - 24	92	54	38	1,609,062	832,517	776,545	5.7	6.5	4.9	4.5	6.9	4.8	8.2	3.3	6.4
25 - 34	159	83	76	1,793,492	998,691	794,801	8.9	8.3	9.6	7.5	10.2	6.5	10.1	7.4	11.7
35 - 44	407	152	255	1,643,440	880,073	763,367	24.8	17.3	33.4	22.4	27.2	14.5	20.0	29.3	37.5
45 - 54	708	311	397	978,139	498,051	480,088	72.4	62.4	82.7	67.1	77.7	55.5	69.4	74.6	90.8
55 - 64	1,049	545	504	506,398	246,133	260,265	207.1	221.4	193.6	194.6	219.7	202.8	240.0	176.7	210.6
65 - 74	1,514	817	697	320,415	146,540	173,875	472.5	557.5	400.9	448.7	496.3	519.3	595.8	371.1	430.6
75 - 84	1,256	676	580	161,694	67,052	94,642	776.8	1,008.2	612.8	733.8	819.7	932.2	1,084.2	563.0	662.7
85 & OLDER	515	239	276	56,213	18,817	37,396	916.2	1,270.1	738.0	837.0	995.3	1,109.1	1,431.2	651.0	825.1
UNKNOWN	0	0	0												
TOTAL	5,799	2,943	2,856	10,688,752	5,537,421	5,151,331	54.3	53.1	55.4	52.9	55.6	51.2	55.1	53.4	57.5
AGE-ADJUSTED							114.7	135.1	101.3	111.6	117.8	129.8	140.4	97.4	105.1
<b>WHITE</b>															
UNDER 1	5	3	2	184,301	94,292	90,009	2.7 *	3.2 *	2.2 *	0.3	5.1	0.0	6.8	0.0	5.3
1 - 4	19	12	7	755,674	387,114	368,560	2.5	3.1 *	1.9 *	1.4	3.6	1.3	4.9	0.5	3.3
5 - 14	54	28	26	2,195,503	1,128,544	1,066,959	2.5	2.5	2.4	1.8	3.1	1.6	3.4	1.5	3.4
15 - 24	86	60	26	2,044,992	1,064,819	980,173	4.2	5.6	2.7	3.3	5.1	4.2	7.1	1.6	3.7
25 - 34	214	104	110	2,203,062	1,129,676	1,073,386	9.7	9.2	10.2	8.4	11.0	7.4	11.0	8.3	12.2
35 - 44	943	388	555	3,021,139	1,533,742	1,487,397	31.2	25.3	37.3	29.2	33.2	22.8	27.8	34.2	40.4
45 - 54	3,022	1,453	1,569	2,641,894	1,321,810	1,320,084	114.4	109.9	118.9	110.3	118.5	104.3	115.6	113.0	124.7
55 - 64	5,870	3,058	2,812	1,763,963	867,898	896,065	332.8	352.3	313.8	324.3	341.3	339.9	364.8	302.2	325.4
65 - 74	10,143	5,328	4,815	1,314,382	612,887	701,495	771.7	869.3	686.4	756.7	786.7	846.0	892.7	667.0	705.8
75 - 84	12,834	6,423	6,411	959,473	390,540	568,933	1,337.6	1,644.6	1,126.8	1,314.5	1,360.8	1,604.4	1,684.9	1,099.3	1,154.4
85 & OLDER	5,968	2,718	3,250	337,128	101,760	235,368	1,770.2	2,671.0	1,380.8	1,725.3	1,815.2	2,570.6	2,771.4	1,333.3	1,428.3
UNKNOWN	3	3	0												
TOTAL	39,161	19,578	19,583	17,421,511	8,633,082	8,788,429	224.8	226.8	222.8	222.6	227.0	223.6	230.0	219.7	225.9
AGE-ADJUSTED							190.4	224.9	169.0	188.5	192.2	221.7	228.0	166.6	171.4

Note: ICD-10 Codes C00-C97; rates are per 100,000 population.  
Year 2000 U.S. standard population is used for age-adjusted rates.  
White, Black, and Asian/Other exclude Hispanic ethnicity.

\* Death rate unreliable, relative standard error is greater than or equal to 23%.  
+ Standard error indeterminate, death rate based on no (zero) deaths.  
- Confidence limit is not calculated for no (zero) deaths.

The race/ethnic groups on this table were tabulated based on the first listed race on those certificates where more than one race was listed.

Source: State of California, Department of Finance, 2000 Population Projections with Age, Sex and Race/Ethnic Detail, December 1998.  
State of California, Department of Health Services, Death Records, 2000.

TABLE 2  
DEATHS DUE TO CANCER  
CALIFORNIA COUNTIES, 1999-2000  
(By Place of Residence)

COUNTY	1999-2000 DEATHS (AVERAGE)	PERCENT	1999 POPULATION	CRUDE RATE	AGE-ADJUSTED RATE	95% CONFIDENCE LIMITS	
						LOWER	UPPER
CALIFORNIA	52,942.5	100.0	34,072,478	155.4	179.8	178.3	181.3
ALAMEDA	2,361.0	4.5	1,448,643	163.0	187.7	180.1	195.3
ALPINE	2.5	a	1,226	203.9 *	235.4 *	0.0	527.7
AMADOR	89.0	0.2	34,410	258.6	174.2	137.5	210.8
BUTTE	500.5	0.9	204,216	245.1	189.9	172.8	206.9
CALAVERAS	108.0	0.2	40,597	266.0	185.5	150.0	221.0
COLUSA	39.0	0.1	20,091	194.1	198.0	135.7	260.3
CONTRA COSTA	1,587.5	3.0	921,662	172.2	178.5	169.7	187.4
DEL NORTE	59.5	0.1	30,358	196.0	180.5	134.4	226.7
EL DORADO	301.0	0.6	156,996	191.7	187.8	166.5	209.2
FRESNO	1,163.0	2.2	800,121	145.4	178.6	168.4	188.9
GLENN	63.5	0.1	28,438	223.3	128.9	164.8	273.0
HUMBOLDT	281.0	0.5	127,658	220.1	221.5	195.6	247.5
IMPERIAL	194.0	0.4	150,381	129.0	167.2	143.6	190.8
INYO	45.5	0.1	18,348	248.0	176.8	124.3	229.3
KERN	971.0	1.8	662,472	146.6	177.4	166.2	188.6
KINGS	135.5	0.3	123,683	109.6	166.8	138.5	195.1
LAKE	164.0	0.3	58,335	281.1	184.5	155.1	213.8
LASSEN	44.5	0.1	35,208	126.4	145.3	102.6	188.1
LOS ANGELES	13,355.5	25.2	9,727,841	137.3	173.1	170.2	176.1
MADERA	191.0	0.4	121,779	156.8	170.0	145.8	194.1
MARIN	450.5	0.9	247,073	182.3	175.9	159.6	192.2
MARIPOSA	51.0	0.1	16,339	312.1	218.7	157.5	279.9
MENDOCINO	195.5	0.4	88,978	219.7	203.8	175.2	232.4
MERCED	304.5	0.6	210,707	144.5	192.8	171.1	214.5
MODOC	17.0	a	10,384	163.7 *	124.7 *	64.8	184.6
MONO	12.0	a	10,730	111.8 *	132.6 *	54.5	210.7
MONTEREY	566.0	1.1	395,133	143.2	179.2	164.4	194.0
NAPA	287.5	0.5	125,123	229.8	188.5	166.5	210.5
NEVADA	238.0	0.4	94,014	253.2	176.6	153.8	199.4
ORANGE	4,004.5	7.6	2,787,593	143.7	183.7	178.0	189.5
PLACER	507.5	1.0	233,836	217.0	220.3	201.1	239.5
PLUMAS	60.0	0.1	20,714	289.7	198.9	147.6	250.1
RIVERSIDE	2,724.0	5.1	1,519,469	179.3	179.2	172.4	186.0
SACRAMENTO	2,141.5	4.0	1,189,056	180.1	203.9	195.3	212.6
SAN BENITO	68.0	0.1	50,087	135.8	156.3	119.1	193.6
SAN BERNARDINO	2,370.5	4.5	1,688,984	140.4	196.3	188.4	204.3
SAN DIEGO	4,658.0	8.8	2,884,572	161.5	189.5	184.0	195.0
SAN FRANCISCO	1,515.5	2.9	788,975	192.1	165.0	156.7	173.4
SAN JOAQUIN	934.0	1.8	566,793	164.8	184.2	172.4	196.0
SAN LUIS OBISPO	467.0	0.9	247,880	188.4	170.1	154.5	185.8
SAN MATEO	1,271.5	2.4	735,381	172.9	170.9	161.5	180.3
SANTA BARBARA	637.5	1.2	408,292	156.1	161.7	149.1	174.2
SANTA CLARA	2,150.5	4.1	1,732,034	124.2	157.7	150.9	164.5
SANTA CRUZ	341.5	0.6	255,825	133.5	145.6	130.1	161.1
SHASTA	382.5	0.7	171,211	223.4	198.4	178.5	218.4
SIERRA	9.5	a	3,427	277.2 *	177.3 *	63.4	291.2
SISKIYOU	119.0	0.2	44,847	265.3	203.9	166.7	241.0
SOLANO	608.5	1.1	392,201	155.2	206.3	189.6	223.0
SONOMA	919.0	1.7	450,187	204.1	194.9	182.3	207.5
STANISLAUS	763.0	1.4	446,056	171.1	200.3	186.1	214.5
SUTTER	134.0	0.3	79,992	167.5	164.6	136.7	192.5
TEHAMA	155.5	0.3	55,806	278.6	224.2	188.4	260.0
TRINITY	39.5	0.1	13,353	295.8	224.8	154.1	295.5
TULARE	534.0	1.0	371,640	143.7	174.4	159.6	189.2
TUOLUMNE	139.0	0.3	54,631	254.4	191.2	158.9	223.5
VENTURA	1,138.5	2.2	744,825	152.9	180.9	170.3	191.4
YOLO	246.5	0.5	160,805	153.3	192.8	168.6	216.9
YUBA	124.0	0.2	63,062	196.6	241.0	198.5	283.5

Note: ICD-10 codes C00-C97; rates are per 100,000 population.

\* Death rate unreliable (relative standard error is greater than or equal to 23%).

a Represents a percentage of more than zero but less than 0.05.

Source: State of California, Department of Finance, Race/Ethnic Population Estimates by County with Age and Sex Detail, 1970-1999, December 1998.  
State of California, Department of Health Services, Death Records.